

Notice of Allowability

Application No.

09/930,616

Examiner

Yemane M. Gerezgiher

Applicant(s)

BENJAMIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/03/2005.
2. ☒ The allowed claim(s) is/are 1-5, 7-15, 17, 19-21 (renumbered 1-18).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Todd A. Cason (Reg. No.: 54,020) on Monday, December 05, 2005

Please amend the claims in this application as follows:

- a. Cancel claims 6, 16, and 18; and
- b. Amend claims 1, 7-14, 17 and 19-21 as enclosed herewith (amendment to the claims are attached).

1. (Currently amended) A method for skills-based routing of a communication session received at a switch, comprising:

receiving, at a switch, a request to establish a communication session between a client and one of a plurality of service agent stations;

generating a profile of the communication session in response to the request, wherein the profile of the communication session comprises at least two attributes;

comparing the profile of the communication session to a skills table, wherein the skills table includes a plurality of service agent records, each service agent record associating a service agent station with one or more skill entries;

identifying, based on the comparison of the profile and the skills table, a subset of the service agent records included in the skills table, wherein the subset contains a plurality of service agent records;

generating an ordered list of service agent records by applying one or more arithmetic algorithms to skill entries associated with the subset of service agent records; and

selecting a service agent station associated with a first service agent record in the ordered list;

receiving, at a server remote from the switch, service agent information from a client, the service agent information pertaining to a service agent station associated with the client;

storing the service agent information on the server;

dynamically updating a skills table utilizing the service agent information, wherein the skills table associates each service agent station with a plurality of skill entries in a service agent record; and

communicating the skills table to the switch.

2. **(Previously presented)** The method of Claim 1, wherein generating a profile of a communication session comprises:

- establishing communication between the client and a voice response unit;
- receiving responses from the client;
- communicating the responses to a remotely located server; and
- generating the profile of the communication session utilizing the responses.

3. **(Previously presented)** The method of Claim 1, wherein comparing the profile of the communication session to a skills table comprises:

- applying one or more arithmetic algorithms to a plurality of attributes included in the profile to generate a plurality of modified attributes; and
- comparing the modified attributes to the skills table.

4. **(Previously presented)** The method of Claim 3, wherein selecting the service agent station comprises:

- assessing whether the service agent station associated with the first service agent record is available;

- selecting the service agent station associated with the first service agent record if the service agent station associated with the first service agent record is available; and

- selecting a service agent associated with a second service agent record in the ordered list if the service agent station associated with the first service agent record is unavailable.

5. **(Original)** The method of Claim 1, wherein the method further comprises establishing a communication session between the client and the selected service agent station.

6. (Canceled)

7. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein receiving the service agent information comprises:
establishing communication between the client and a voice response unit;
requesting, through operation of the voice response system, service agent information pertaining to a service agent station associated with the client;
receiving data from the client at the server, wherein the data comprises at least one response to the request; and
converting the data into numeric values.

8. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein receiving the service agent information comprises:
establishing communication between the client and a network-based feedback system;
requesting, through operation of the network-based feedback system, service agent information pertaining to a service agent station associated with the client;
receiving data from the network-based system in response to the request; and
converting the data into numeric values.

9. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein dynamically updating a skills table comprises:
associating the service agent information to the appropriate service agent record in the skills table; and
updating at least one service agent record associated with the service agent information.

10. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein service agent information comprises information received from a supervisor workstation.

11. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein communicating the skills table to a switch is in response to a request from the switch.

12. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein communicating the skills table to the switch ~~a switch~~ comprises communicating a subset of the skills table from the server to the switch.

13. (Currently amended) The method of Claim 1 ~~Claim 6~~, wherein the switch comprises an automatic call distributor.

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14. (Currently amended) Software for skills-based routing of a communication session received at a switch, the software being embodied in a computer-readable medium and when executed by one or more computers ~~a computer~~ operable to:

receive, at a switch, a request to establish a communication session between a client and a service agent station;

generate a profile of the communication session in response to the request, wherein the profile of the communication session comprises at least two attributes;

compare the profile of the communication session to a skills table, wherein the skills table includes a plurality of service agent records, each service agent record associating one of a service agent station with one or more skill entries;

identify, based on the comparison of the profile and the skills table, a subset of the service agent records included in the skills table, wherein the subset contains a plurality of service agent records;

generate an ordered list of service agent records by applying one or more arithmetic algorithms to skill entries associated with the subset of service agent records; ~~and~~

select a service agent station associated with a first service agent record in the ordered list;

receiving, at a server remote from the switch, service agent information from a client, the service agent information pertaining to a service agent station associated with the client;

storing the service agent information on the server;

dynamically updating a skills table utilizing the service agent information, wherein the skills table associates each service agent station with a plurality of skill entries in a service agent record; and

communicating the skills table to the switch.

15. (Previously presented) The software of Claim 14, wherein comparing the profile of the communication session to a skills table comprises:

applying one or more arithmetic algorithms to a plurality of attributes included in the profile to generate a plurality of modified attributes; and

comparing the modified attributes to the skills table.

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16. (Canceled)

17. (Currently amended) The software of Claim 14 ~~Claim 16~~, wherein updating a skills table comprises:

associating the service agent information to the appropriate service agent record in the skills table; and

updating at least one service agent record associated with the service agent information.

18. (Canceled)

19. (Currently amended) The server of Claim 20 ~~Claim 18~~, wherein operable to update the skills table comprises:

operable to associate the service agent information to the appropriate service agent record in the skills table; and

further operable to update at least one service agent record associated with the service agent information.

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20. (Currently amended) A server, comprising:

an interface operable to communicate with a network, the interface further ~~operable to~~
operable to:

receive a request to establish a communication session between a client
and one of a plurality of service agent stations;

receive service agent information from a client, the service agent
information pertaining to a service agent station associated with the client;
and

after a skills table has been updated, communicate the updated skills
table to a switch, wherein the skills table associates each service agent station
to a plurality of skill entries in a service agent record;

a processing module coupled to the interface, the processing module operable to:

generate a profile of the communication session in response to the request,
wherein the profile of the communication session comprises at least two attributes;

compare the profile of the communication session to a skills table, wherein the
skills table includes a plurality of service agent records, each service agent record
associating a service agent with one or more skill entries;

identify, based on the comparison of the profile and the skills table, a subset of the
service agent records included in the skills table, wherein the subset contains a plurality
of service agent records;

generate an ordered list of service agent records by applying one or more
arithmetic algorithms to skill entries associated with the subset of service agent records;
and

select a service agent station associated with a first service agent record in the
ordered list; and

dynamically update the skills table utilizing the service agent information;

and

a storage medium coupled to the processing module, the storage medium operable to
store the skills table.

21. (Currently amended) The server of Claim 20, wherein the processing module
is operable to compare the profile of the communication session to a skills table by:

applying one or more arithmetic algorithms to a plurality of attributes included in the
profile to generate a plurality of modified attributes; and

comparing the modified attributes to the skills table.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached at (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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